



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/774,018

02/06/2004

Beatrix Kottwitz

HENK-0060/H4714

7927

38857 7590 01/19/2007  
WOODCOCK WASHBURN LLP  
CIRA CENTRE, 12TH FLOOR  
2929 ARCH STREET  
PHILADELPHIA, PA 19104-2891

EXAMINER

MOORE, WILLIAM W

ART UNIT

PAPER NUMBER

1656

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

31 DAYS

01/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/774,018

Applicant(s)

KOTTWITZ ET AL.

Examiner

William W. Moore

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 47-68, 71 and 73-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 47-68, 71, and 73-78 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

*Election/Restrictions*

The requirement for restriction mailed 11 October 2006, which failed to distinguish the multiple inventions claimed herein on the basis of the structures of various chimeric amylases, is VACATED, and is replaced by the following requirement for restriction based on the separate and distinct structures that define genera of hybrid amylases, the genera based on claims 47-52 taken in view of the further alterations of claims 53 and 73, that are present in the cleaning compositions of the claims.

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

1. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 17 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
2. Claims 47, 48, 49, 52-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 19 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
3. Claims 47, 49, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 34 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
4. Claims 47, 50, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 76 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

Art Unit: 1656

5. Claims 47, 49, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 84 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
6. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 99 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
7. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 108 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
8. Claims 47, 49, 51, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 112 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
9. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 142 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
10. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 147 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

Art Unit: 1656

11. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 149 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
12. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 151 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
13. Claims 47, 49, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 153 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
14. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 163 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
15. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 173 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
16. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 179 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

Art Unit: 1656

17. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 185 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
18. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 191 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
19. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 198 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
20. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 201 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
21. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 207 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
22. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 231 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

Art Unit: 1656

23. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 234 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
24. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 244 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
25. Claims 47, 49, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 256 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
26. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 263 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
27. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 276 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
28. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 429 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

Art Unit: 1656

29. Claims 47, 48, 53-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 431 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.
30. Claims 47, 52-68, 71, and 73-78, drawn to a cleaning composition comprising a member of a genus of hybrid amylases wherein the mature amylase having the amino acid sequence set forth in SEQ ID NO:4 is fused to the mature amylase having the amino acid sequence set forth in SEQ ID NO:2 at a position that corresponds to position 433 in the amino acid sequence of SEQ ID NO:4, to a method of making the composition, and to a method of use thereof in cleaning a textile or a hard surface classified in class 510, subclass 300.

The inventions are independent or distinct, each from the other because:

Groups 1-30 are each drawn to compositions comprising amylases modified in a distinct way. While they are classified identically, Groups 1-30 are distinct, each from the other, by virtue of the distinct structure of a chimeric amylase of each where the different structures are not significantly related to each other except via the function of an amylase. Thus, each chimeric polypeptide, as defined by its structure, is patentably distinct from the others, requiring separate searches in commercial and USPTO amino acid sequence databases.

Because these inventions are independent or distinct for the reasons given above and the search required for the structure of one Group is not required for the structure of another Group, restriction for examination purposes as indicated is proper. Thus, Groups 1-30 have been appropriately restricted on the basis of being both independent or distinct and presenting an additional search burden on the Examiner if they were to be searched together.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not



Art Unit: 1656

distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant elect an invention not yet represented by an amino acid sequence disclosed in the Sequence Listing filed 12 October 2004, applicant must amend the text of the specification, the claims, and the Sequence Listing in both printed and computer-readable forms, so that (i) the specification complies with the requirements of 37 CFR 1.821 through 1.825 and (ii) the elected invention can be searched.

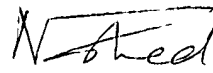
Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103(a) of the other invention.

#### *Conclusion*

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is 571.272.0933 and whose FAX number is 571.273.0933. The examiner can normally be reached Monday through Friday between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisory Primary Examiner, Dr. Kathleen Kerr Bragdon, can be reached at 571.272.0931. The official FAX number for all communications for the organization where this application or proceeding is assigned is 571.273.8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571.272.1600.

William W. Moore  
11 January 2007

  
NASHAAT T. NASHED PH.D.  
PRIMARY EXAMINER